



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,855	10/26/2001	Joseph D. Wong	100110541-1	4385

7590 06/14/2004
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

CHU, GABRIEL L

ART UNIT	PAPER NUMBER
----------	--------------

2114

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/008,855

Applicant(s)

WONG ET AL.

Examiner

Gabriel L. Chu

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 30-36 is/are rejected.
- 7) ☒ Claim(s) 2-29 and 37-64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims objected to because of the following informalities:

Referring to claims 11 and 12, “the step of analyzing...” and “the step of providing...” has an unclear antecedent. Wherein in claim 9, the network parameter “relates” to a node timeout value” and the predetermined reference value “comprises” a predefined threshold range, it is not clear if these are, in fact, the values that are being used to analyze the current value of the network parameter relative to a predetermined reference value. For the purpose of examination, claim 9 is understood to refer to “wherein the network parameter relates to a node timeout value for a node in the cluster computer system and the predetermined reference value comprises a predefined threshold range for the node timeout value, wherein the step of analyzing the current value analyzes the current value of the node timeout value relative to the predefined threshold range and the step of providing information provides information based on the analysis of the current value relative to the predefined threshold range for the node timeout value”.

Referring to claims 14, 15, 17, and 19, “the step of providing... and the predefined recommended range” has an unclear antecedent. Wherein in claims 14, 15, 17, and 19, the predetermined reference value further “comprises” a predefined recommended range, it is not clear if this is, in fact, the value being used to analyze and provide information. For the purpose of examination, claims 14, 15, 17, and 19 are understood to refer to “wherein the predetermined reference value further comprises a

predefined recommended range and wherein the step of providing information provides information based on the analysis of the current value relative to the predefined threshold range and the predefined recommended range, the step of providing information further comprises...”.

Referring to claim 25, “the autostart timeout interval” is understood to refer to “the network polling interval”, correcting for antecedence.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 30-36 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5758077 to Danahy et al. Referring to claim 1, Danahy et al. disclose a method for providing automated diagnostic services for a cluster computer system comprising a plurality of nodes (From the abstract, “A distributed computer system...”), each of the plurality of nodes providing an application to a plurality of clients (From the abstract, “The computer system includes plural host computers which act as servers and clients in connection with the services.”), the method comprising the steps of: receiving a current value of a network parameter (From the abstract, “The service monitor periodically interrogates each host computer in the functional entity with a set of queries; records responses thereto...”) related to cluster middleware associated with the

cluster computer system (From the abstract, "In addition, status changes are calculated for further system layers of functionality so as to determine the effect thereon of the status change." Further, from line 55 of column 2, "A distributed computer system service monitor provides information to a user regarding the status of services available on the computer system."); analyzing the current value of the network parameter relative to a predetermined reference value for the network parameter (From the abstract, "...records responses thereto and employs the responses to determine if a change in status of any of the services has occurred."); and providing information based on the analysis of the current value relative to the predetermined reference value (From the abstract, "If a change in status is determined, the change is indicated to the user.").

Referring to claim 30, Danahy et al. disclose a system for providing automated diagnostic services for a cluster computer system comprising a plurality of nodes (From the abstract, "A distributed computer system..."), each of the plurality of nodes providing a mission-critical application to a plurality of clients (From the abstract, "The computer system includes plural host computers which act as servers and clients in connection with the services." Further, from line 38 of column 3, "For example, host computers 14 and 16 perform a database function and comprise a domain in distributed computing system 10."), the system comprising: a first portion of logic configured to receive a current value of a network parameter (From the abstract, "The service monitor periodically interrogates each host computer in the functional entity with a set of queries; records responses thereto...") related to cluster middleware associated with the

cluster computer system (From the abstract, "In addition, status changes are calculated for further system layers of functionality so as to determine the effect thereon of the status change." Further, from line 55 of column 2, "A distributed computer system service monitor provides information to a user regarding the status of services available on the computer system."); a second portion of logic configured to analyze the current value of the network parameter relative to a predetermined reference value for the network parameter (From the abstract, "...records responses thereto and employs the responses to determine if a change in status of any of the services has occurred."); and a third portion of logic configured to provide information based on the analysis of the current value relative to the predetermined reference value (From the abstract, "If a change in status is determined, the change is indicated to the user.").

Referring to claim 31, Danahy et al. disclose a computer configured to store and implement the first, second, and third portions of logic (From figure 1, element 12.).

Referring to claim 32, Danahy et al. disclose the first, second, and third portions of logic are embodied in an operating system associated with the computer (From line 55 of column 2, "A distributed computer system service monitor provides information to a user regarding the status of services available on the computer system." Wherein if the service monitor is providing information to a user, it can only be through an operating system.).

Referring to claim 33, Danahy et al. disclose the first, second, and third portions of logic are embodied in cluster middleware associated with the computer (From the abstract, "In addition, status changes are calculated for further system layers of

functionality so as to determine the effect thereon of the status change." Further, from line 55 of column 2, "A distributed computer system service monitor provides information to a user regarding the status of services available on the computer system." Wherein, the service monitor at least operates for further layers, and operates in between services and the status presenting means.).

Referring to claim 34, Danahy et al. disclose a network interface card configured to communicate with a cluster interface (From figure 1, a plurality of host computers are interconnected by a network.).

Referring to claim 35, Danahy et al. disclose one or more clients in communication with the computer via the cluster interface (From the abstract, "The computer system includes plural host computers which act as servers and clients in connection with the services.").

Referring to claim 36, Danahy et al. disclose a network interface configured to communicate with the cluster computer system via a communications network (From figure 1, a plurality of host computers are interconnected by a network.) and wherein the current value of the network parameter is received via a communications network (From the abstract, "The service monitor periodically interrogates each host computer in the functional entity with a set of queries; records responses thereto...") and the information based on the analysis is provided to the cluster computer system via the communications network (From line 55 of column 2, "A distributed computer system service monitor provides information to a user regarding the status of services available on the computer system.").

Allowable Subject Matter

4. Claims 2-29 and 37-64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Referring to claims 2-7 and 37-43, the prior art does not teach or fairly suggest, in light of the parent claim, the network parameter relates to a network heartbeat interval for a node in the cluster computer system and the predetermined reference value is an optimal network heartbeat interval for the node based on the current heartbeat link for the node.

Referring to claims 9-19 and 44-54, the prior art does not teach or fairly suggest, in light of the parent claim, the network parameter relates to a node timeout value for a node in the cluster computer system and the predetermined reference value comprises a predefined threshold range for the node timeout value.

Referring to claims 20-24 and 55-59, the prior art does not teach or fairly suggest, in light of the parent claim, the network parameter relates to an autostart timeout interval for a node in the cluster computer system and the predetermined reference value comprises a predefined range for the autostart timeout interval.

Referring to claims 25-29 and 60-64, the prior art does not teach or fairly suggest, in light of the parent claim, the network parameter relates to a network polling interval for a node in the cluster computer system and the predetermined reference value comprises a predefined range for the network polling interval.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 4598363 to Clark et al.

US 5471564 to Dennis et al.

US 5566351 to Crittenden et al.

US 5828583 to Bush et al.

US 5894583 to Johnson et al.

US 6173339 to Yorimitsu

US 6363496 to Kwiat

US 6405337 to Grohn et al.

US 6446225 to Robsman et al.

US 6615161 to Carney et al.

US 6738923 to Blam et al.


US 6502203 to Barron et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (703) 308-7298. The examiner can normally be reached on weekdays between 8:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel, Jr. can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gc


ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100